Catalyst Inline Power Patch Panel

DEPLOYED IN THE WIRING CLOSET, THE CATALYST INLINE POWER PATCH PANEL PROVIDES FAST ETHERNET ENHANCEMENTS NEEDED FOR MULTISERVICE NETWORKING WHILE PRESERVING CUSTOMER INVESTMENTS IN EXISTING CATALYST® SWITCH EQUIPMENT.

The Catalyst Inline Power Patch Panel extends the features and functionality of the award-winning Catalyst family of switches.

Inline Power

The Catalyst Inline Power Patch Panel enables inline power for Cisco multiservice enabled Catalyst switches. This product supports a new feature called inline power. Inline power is 48-volt DC power provided over standard Category 5 unshielded twisted-pair (UTP) cable up to 100 meters. Instead of requiring wall power, terminal devices such as IP telephones can utilize power provided from the Catalyst Inline Power Patch Panel. This capability gives the network administrator centralized power control, which translates into greater network availability. By deploying Catalyst gear with uninterruptable-power-supply (UPS) systems in secured wiring closets, network administrators can ensure that building power outages will not affect network telephony connections.

The inline power feature will work over a customer's existing Category 5 UTP installations. The Catalyst inline power implementation passes the required domestic and international safety regulations and compliance measures. These modules are fully compliant with the 802.3 standard when no inline power is supplied. The 802.3 standard does not include specifications for providing power over the Ethernet. This omission will be amended by the 802.3af task force currently under way in the Institute of Electrical and Electronic Engineers (IEEE). Cisco is committed to standards-based operation and will support the IEEE in its efforts to add Ethernet power specifications to the 802.3 Ethernet standard.

Phone Discovery

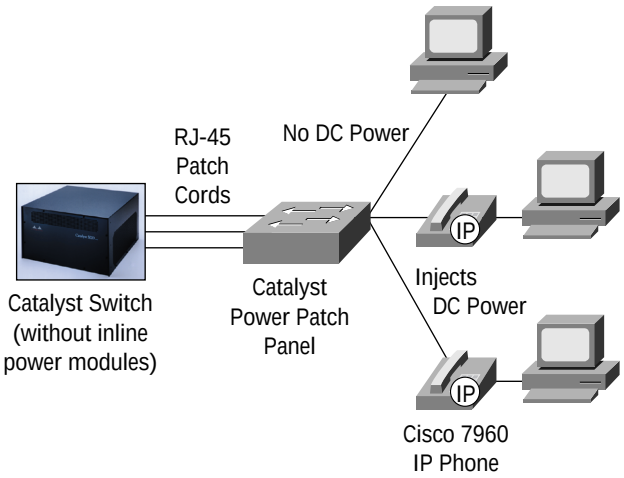
The Cisco phone discovery feature eases the network management burden by automating the inline power feature. With phone discovery, the Catalyst Inline Powered Patch Panel automatically detects the presence of an IP phone and supplies inline power. This means that network administrators can maintain centralized control without the need to manually enable each port to supply inline power. The phone discovery mechanism is intelligent enough to differentiate between an IP phone and a network interface card (NIC), and will not supply inline power to a NIC or

other device not designed to use inline power. Network administrators can depend upon automatic and centralized control of inline power that is safe to deploy and maintain.

Flexible Form Factor

Each Catalyst Inline Power Patch Panel supports up to 48 users. Multiple Catalyst Inline Power Patch Panels can be deployed in a wiring closet to support more users. All the interfaces are accessible from the front, ideal placement for network administrators who manage wiring-closet connections. To support 48 users, the Inline Power Patch Panel provides 96 RJ-45 ports, 48 ports to connect with Catalyst switch ports, and 48 ports to connect with the end stations or terminal devices. Figure 1 shows an example of the Inline Power Patch Panel used without a traditional RJ-45 patch panel.

Figure 1 Catalyst Inline Power Patch Panel used without a traditional RJ-45 path panel.

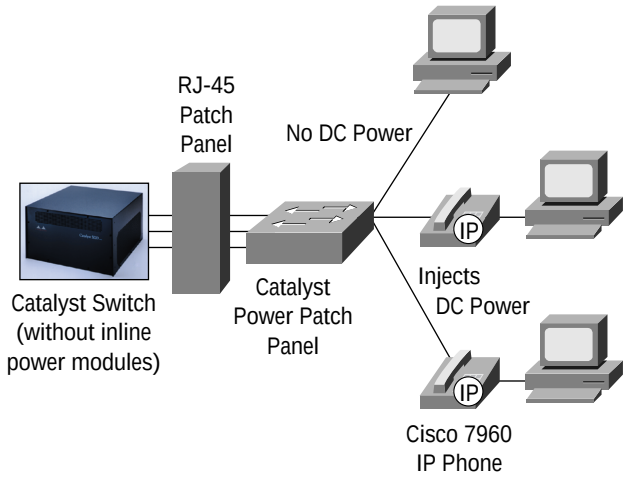


The Catalyst Inline Power Patch Panel can also work in conjunction with the existing patch-panel configuration (see Figure 2). Ethernet terminals use pins 1, 2, 3, and 6 for data transmission, and the Catalyst Inline Power Patch Panel does not access or insert power into these wire pairs. The Catalyst Inline Power Patch Panel acts as a normal patch panel for Ethernet connections that do not require inline power, ensuring reliable performance by keeping unneeded circuitry out of these normal patch-panel connections. The Catalyst Inline Power Patch Panel provides power only on the unused Fast Ethernet pins 4, 5, 7, and 8. Network administrators can count on reliable power distribution that will not interfere with network operations that do not require inline power.

Plug and Play

Fast installation requires no special tools or training. No configuration is necessary for the Catalyst Inline Power Patch Panel. The phone discovery mechanism is on by default, and it automatically detects phones and supplies inline power. The rugged, self-contained design ensures reliable everyday performance. Its compact size, only two rack units (RUs) high, allows easy rack mounting and preserves valuable space in the wiring closet.

Figure 2 Catalyst Inline Power Patch Panel used with existing patch-panel configuration.



Ordering Information:

Product Number	Description
WS-PWR-PANEL	Catalyst Inline Power Patch Panel

Specifications

Dimensions
(H x W x D) (3.4 x 17.2 x 12.0 in.) (8.6 x 43.7 x 30.5 cm)

Weight
12 lb (5.4 kg)

Mounting
19-in. rack-compatible (rack and cable guide hardware included)

Power Requirements
AC Input Voltage: 85 to 264 VAC
AC Frequency: 47 to 63 Hz
AC Input Current: 4A at 100 VAC, 2A at 240 VAC
System Power Dissipation: 330W
KVA Rating: 0.35 KVA max

Inline Power Specifications
Pin Assignments: 4&5, 7&8
Output Power Voltage: –48 VDC (nominal)

Heat Dissipation
1125 Btu/hr max

Modular Jacks

Compliance
8-pin modular jacks conform to all requirements specified in FCC regulations (Part 68, Subpart F, "Connectors") and in ISO 8877, First Edition ("Information Processing Systems—Interface connector and contact assignments for ISDN basic access interface located at reference points S and T")

Modularity
8-pin, 4-pair

Pin-Out
EIA T568A and T568B

Mechanical Performance

Insertion Life
750 cycles minimum

Plug/Jack Contact Force
100 grams minimum using FCC-approved plug

Plug Retention Force
30 lb (133 Newtons) minimum

Environmental Conditions

Operating Temperature
32 to 104 F (0 to 40 C)

Storage Temperature
–40 to 185 F (–40 to 85 C)

Relative Humidity
10% to 90%, noncondensing

Operating Altitude
–500 to 10,000 ft. (–152 to 2050 m)

Regulatory Compliance

Safety Certifications
- UL 1950
- EN 60950
- CSA-C22.2 No. 950-95
- IEC 60950
- AS/NZS 3260

Electromagnetic Emissions Certifications
- FCC 15J Class A
- VCCI Class A with UTP, Class B with STP cables
- CE marking
- EN 55022 Class A with UTP, Class B with STP cables
  CISPR 22 Class B

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